

WHAT IS CLAIMED IS:

1. A gripper device for cardiac ablation comprising:
 - at least one moveable arm having an inner and outer surface; and,
 - one or more ablators disposed on said inner surface of said moveable arm.
2. The gripper device of claim 1 wherein said ablator comprises a direct current electrode.
3. The gripper device of claim 1 wherein said ablator comprises a radio frequency electrode.
4. The gripper device of claim 1 wherein said ablator comprises an ultrasound transducer.
5. The gripper device of claim 1 wherein said ablator comprises a laser.
6. The gripper device of claim 1 wherein said ablator comprises a cryogenic probe.
7. The gripper device of claim 1 wherein said plurality of arms is dimensioned for insertion through an endoscope.
8. The gripper device of claim 1 wherein said device is dimensioned for insertion into a catheter.
9. The gripper device of claim 1 wherein said inner surface of at least one of said arms is serrated.
10. The gripper device of claim 1 wherein said ablator is serrated.
11. The gripper device of claim 1 wherein at least one of said arms is dimensioned and shaped to grip the epicardial circumference.
12. The gripper device of claim 1 wherein said one or more ablators are disposed along said at least one arm in a geometric pattern.
13. The gripper device of claim 1 wherein said ablator comprises a linearly disposed plurality of electrodes.
14. The gripper device of claim 3 wherein said ablator comprises a linearly disposed plurality of electrodes.

15. The gripper device of claim 1 wherein said ablators comprise one or more optical fibers connected to a laser source.
16. The gripper device of claim 1 wherein the device is made of shape memory materials.
17. The gripper device of claim 1 wherein an ultrasound imaging probe lies on the inner surface of the gripper.
18. The gripper device of claim 1 wherein a miniature video camera or optical imaging fiber lies on the inner surface of the gripper.
19. The gripper device of claim 1 wherein said ablator is located on at least two of said arms.
20. A method for epicardial ablation comprising the steps of:
 - gripping said epicardial surface with a gripper device comprising a plurality of arms, each arm having an inner and an outer surface, wherein at least one of said arms is moveable; and, an ablator wherein said ablator is disposed on said inner surface of at least one of said moveable arms; and
 - applying said ablator to said epicardium such that cardiac conductive tissue is ablated.
21. The method of claim 20 wherein said step of applying said ablator comprises applying radio frequency energy to said ablator.
22. The method of claim 20 wherein said step of applying said ablator comprises applying DC current to said ablator.
23. The method of claim 20 wherein said step of applying said ablator comprises applying a cryogenic fluid to said ablator.
24. The method of claim 20 wherein said step of applying said ablator comprises applying laser energy to said ablator.
25. The method of claim 20 wherein said step of applying said ablator comprises applying ultrasound energy to said ablator.
26. An electrode system for epicardial ablation comprising:
 - a probe comprising,
 - an adjustable, flexible substrate, forming a substantially closed loop, the probe having a cross section and at least one contact surface; and

at least one ablator located on the at least one contact surface of the probe, wherein the loop is sized to substantially encompass a structure of the heart.

27. The electrode system of claim 26 wherein the loop is sized to substantially encompass an epicardial structure.
28. The electrode system of claim 26 wherein said ablator on said probe is positioned on at least two of said contact surfaces.
29. The electrode system of claim 26 wherein the cross section of the probe is substantially D-shaped and the at least one ablator is positioned substantially on the flat surface of the D-shaped cross section.
30. The electrode system of claim 26 wherein the cross section of the probe is substantially circular and said ablator is positioned on one semicircle of the circular cross section.
31. The electrode system of claim 26 wherein the cross section of the probe is rectangular and the at least one ablator is positioned on the at least one surface of the rectangular cross section.
32. The electrode system of claim 26 wherein said at least one ablator comprises a plurality of ablators, and each of said plurality of ablators is individually-actuateable.
33. The electrode system of claim 26 wherein said probe further comprises a first end and a second end, wherein the diameter of said loop is adjusted by a pull-string attached to one end of said probe.
34. The electrode system of claim 26 wherein the at least one ablator comprises a plurality of ablators and elastic elements interspersed between and connecting pairs of the plurality of ablators.
35. The electrode system of claim 26 wherein said probe is removably connected to a handle.
36. The electrode system of claim 26 wherein said at least one ablator is a direct current electrode.
37. The electrode system of claim 26 wherein said ablator is a radio frequency electrode.
38. The electrode system of claim 26 wherein said ablator is an ultrasound transducer.
39. The electrode system of claim 26 wherein said ablator is a laser source.
40. The electrode system of claim 26 wherein said ablator is a cryogenic probe.

41. The electrode system of claim 26 wherein said probe is dimensioned for insertion through an endoscope.
42. The electrode system of claim 26 wherein said probe is dimensioned for insertion through a thoracoscope.
43. The electrode system of claim 26 wherein at least one of said contact surfaces of said probe is serrated.
44. The electrode system of claim 26 wherein said adjustable flexible substrate comprises an elastic material.
45. The electrode system of claim 26 wherein said probe further comprises a cooling system in communication with said contact surface of said probe.
46. The electrode system of claim 26 wherein said probe further comprises an attachment device in communication with said contact surface of said probe.
47. The electrode system of claim 46 wherein said attachment device comprises a suction device in communication with said contact surface of said probe.
48. The electrode system of claim 46 wherein said attachment device comprises a gripping device in communication with said contact surface of said probe.
49. An electrode system comprising:
a glove; and,

a probe comprising an adjustable, flexible substrate, the probe having a cross section and at least one contact surface; at least one ablator located on the at least one contact surface of the probe, wherein said probe is in communication with said glove.
50. The electrode system of claim 49 wherein said probe is in communication with at least one finger.
51. A method for epicardial ablation comprising the steps of:

applying to the epicardium an adjustable, flexible substrate forming a substantially closed probe, and having an inner surface; and, at least one ablator located on the inner surface of the probe, wherein the probe is sized to substantially encompass a structure of the heart; and

ablating tissue within said structure of the heart.

52. A method for epicardial ablation comprising the steps of:

providing a glove comprising at least one ablator located on said glove;

gripping the heart with said glove; and

ablating cardiac tissue with the ablator located on said glove.

53. An electrode system for epicardial ablation comprising:

a probe comprising an adjustable, flexible substrate forming a substantially closed loop, the probe having a cross section and at least one contact surface; and,

a plurality of ablators located on the at least one contact surface of the probe, wherein each of the plurality of ablators is removably attached to the substrate; and, wherein the loop is sized substantially to encompass a structure of the heart.

54. A system for detecting the relative epicardial location of an endocardial ablator comprising:

an ablator position indicator located on an endocardial device; and,

a detector located on an epicardial probe, wherein said ablator position indicator indicates the endocardial location of the ablator and the position detector detects the position of the ablator position indicator in response thereto, thereby localizing the endocardial ablator.

55. A system for detecting the relative epicardial location of an endocardial ablator comprising:

an ablator position indicator located on an endocardial device; and,

a position detector located on an epicardial probe, wherein the ablator position indicator transmits a signal and the position detector receives the signal transmitted by the ablator position indicator indicating the location of the endocardial ablator.

56. The system of claim 54 wherein the indicator comprises a magnet.

57. The system of claim 54 wherein the detector comprises a magnetic field detector.

58. The system of claim 54 wherein the indicator and detector comprise electromagnets.

59. The system of claim 55 wherein the indicator is a radiofrequency signal and the detector is a radiofrequency detector.

60. A system of claim 55 wherein the indicator is only on one surface.

61. The system of claim 55 wherein the indicator is a light transmitter and the detector comprises a light detector.
62. The system of claim 55 where in the indicator comprises a transmitter of laser light.
63. The system of claim 55 wherein the indicator comprises a light source emitting fluorescence.
64. The system of claim 55 wherein the detector comprises an echocardiograph.
65. A method for detecting the position of an endocardial ablation device and for transmyocardial ablation comprising the steps of:

indicating the position of an endocardial ablator with an indicator located on an endocardial device;

detecting the position of the indicator with a detector located on an epicardial probe, wherein the detector detects the position of the indicator thereby localizing the endocardial ablator; and,

applying transmyocardial ablation.

66. The system of claim 54 wherein the detector comprises a magnet.
67. The system of claim 54 wherein the detector comprises a magnet and the indicator comprises a metallic element.
68. The system of claim 54 wherein the indicator comprises a magnet and the detector comprises a metallic element.